

# Channel Study

REFERENCE		CH# 238D - 95.5 MHz, Pwr= 0.07 kW, HAAT= 0.0 M, COR= 345 M								DISPLAY DATES	
39 21 10.8 N.		Average Protected F(50-50)= 5.1 km								DATA 12-14-12	
84 19 44.2 W.		Omni-directional								SEARCH 12-14-12	
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
235B Fairfield	WREW	LIC	CN OH	224.6 44.4	23.81 BLH19921014KE	39 12 01.0 84 31 22.0	10.500 322	5.3 542	66.3 Cincinnati Fcc	8.3 License	-43.6*< Sub
237A Xenia	WZLR	LIC	ZC OH	50.2 230.5	48.50 BMLH20010810AAN	39 37 52.0 83 53 39.0	6.000 98	47.4 388	30.9 Cox Radio, Inc.	-9.0<	3.6
239L1 Cincinnati	NEW	CP	OH	200.4 20.4	19.18 BNPL20010122AHT	39 11 28.0 84 24 24.0	0.018 70	5.2 285	3.6 Victory Church	5.5	3.6
239B Pleasant Hill	WHIO-FM	LIC	CX OH	1.8 181.8	96.03 BLH20110712ABT	40 13 03.0 84 17 37.0	50.000 145	78.4 444	65.4 Cox Radio, Inc.	7.4	9.2
239L1 Cincinnati	WVQC-LP	LIC	OH	210.2 30.1	29.07 BLL20110323ABK	39 07 36.2 84 29 54.3	0.012 86	8.2 293	5.9 Media Bridges Cincinnati,	11.2	9.8
241B Richmond	WQLK	CP	CX IN	319.2 138.8	79.29 BPH20101213ABM	39 53 28.5 84 56 09.5	50.000 150	6.2 474	66.8 Brewer Broadcasting Corp.	62.9	11.4
241B Richmond	WQLK	LIC	C IN	319.3 138.9	79.39 BLH19990719KE	39 53 33.0 84 56 09.0	50.000 150	6.2 474	66.7 Brewer Broadcasting Corp.	63.0	11.5
238B Lancaster	WHOK-FM	LIC	DCN OH	75.3 256.3	146.58 BLH19941223KB	39 40 32.0 82 40 34.0	21.000 232	123.5 527	62.7 Wilks License Company-colu	13.1	36.4
238B Fishers	WFMS	LIC	CX IN	288.3 107.3	151.07 BLH20101203ABU	39 46 03.0 86 00 12.0	13.000 302	127.3 555	66.5 Susquehanna Radio Corp.	13.8	36.6
237D Covington	640225	APP	C KY	207.6 27.4	42.91 BNPFT20030317FFF	39 00 37.7 84 33 32.9	0.170 69	17.8 299	12.1 Edgewater Broadcasting, In	15.8	17.9
238C Prestonsburg	WQHY	LIC	CN KY	142.9 323.9	229.42 BLH19910521KB	37 41 45.0 82 45 24.0	100.000 305	175.7 575	74.7 Wdoc, Inc.	43.6	120.6
237D Richmond	W237AT	LIC	CN IN	318.2 137.9	75.33 BLFT19930927TJ	39 51 24.0 84 55 00.0	0.050 36	7.3 357	5.2 Educational Media Foundati	57.8	55.8
240A Vevay	WKID	LIC	CN IN	226.7 46.3	83.45 BLH6405	38 50 12.0 85 01 48.0	2.800 94	2.1 324	21.4 Dial Broadcasting Inc	71.1	61.5
240A Maysville	WFTM-FM	LIC	CN KY	148.8 329.2	92.06 BLH19960207KA	38 38 35.0 83 46 47.0	3.000 94	2.7 333	29.8 Standard Tobacco Company,	79.4	61.7
237A Carrollton	WIKI	LIC	CN KY	227.4 46.8	112.30 BLH19930212KD	38 39 58.0 85 16 51.0	1.800 129	36.8 337	24.4 Wagon Wheel Broadcasting,	65.2	73.3

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 Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in  
 KM  
 Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd  
 adjacent.  
 All separation margins (if shown) include rounding  
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E),  
 Beamtilt(Y,N,X)  
 "\*"affixed to 'IN' or 'OUT' values = site inside protected contour.  
 < = Contour Overlap  
 Reference station has protected zone issue:

FMCommander Single Allocation Study - 12-14-2012 - NGDC 30 SEC  
W292DT.P's Overlaps (In= -8.95 km, Out= 3.57 km)

W292DT.P CH 238 D

Lat= 39 21 10.8, Lng= 84 19 44.2

0.07 kW 0 M HAAT, 345 M COR

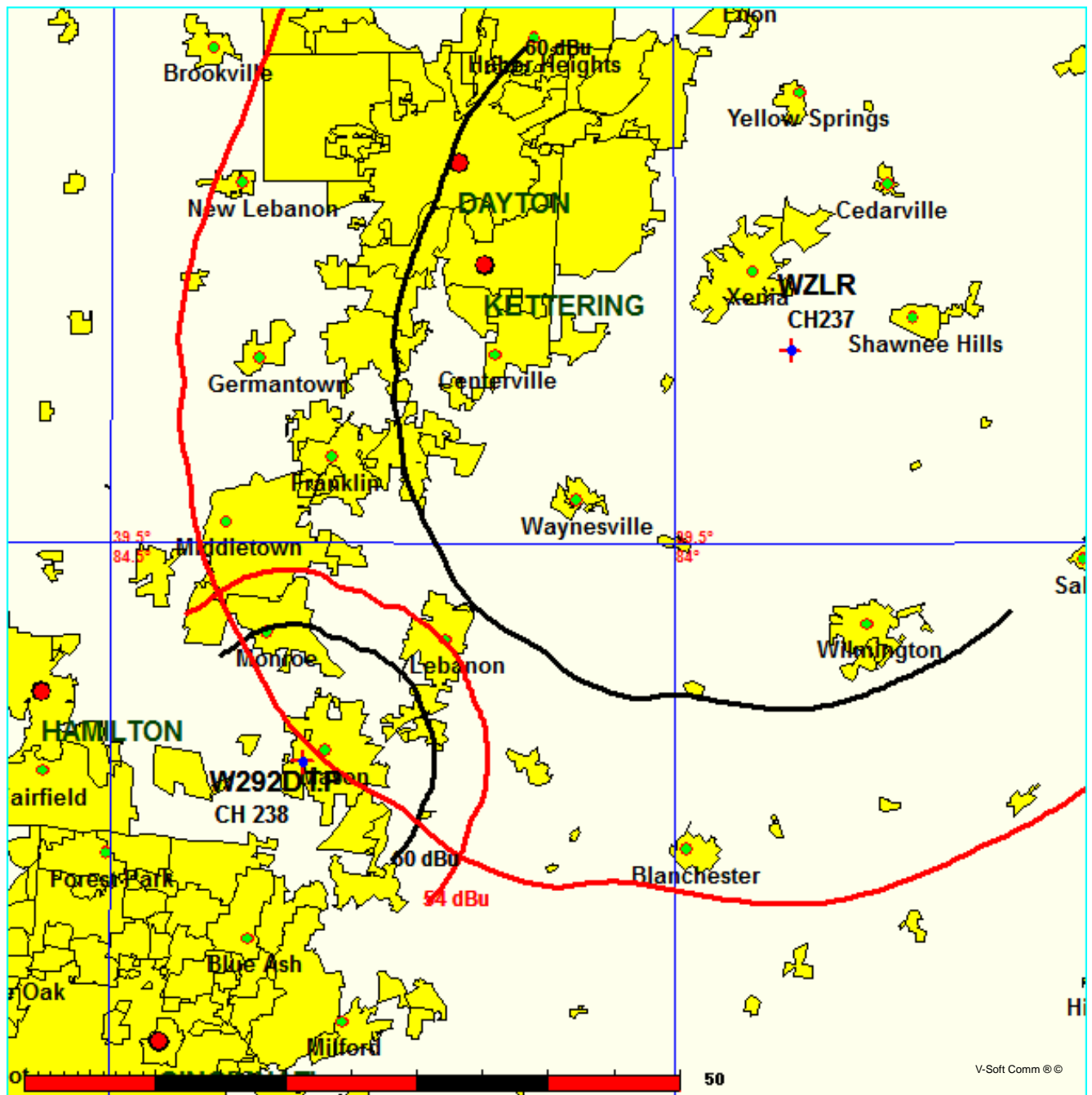
Prot.= 60 dBu, Intef.= 54 dBu

WZLR CH 237 A 73.215 Z BMLH20010810AAN

Lat= 39 37 52.0, Lng= 83 53 39.0

6.0 kW 98 M HAAT, 388 M COR

Prot.= 60 dBu, Intef.= 54 dBu



FMCommander Single Allocation Study - 12-14-2012 - NGDC 30 SEC  
W292DT.P's Overlaps (In= 5.54 km, Out= 3.6 km)

W292DT.P CH 238 D

Lat= 39 21 10.8, Lng= 84 19 44.2

0.07 kW 0 M HAAT, 345 M COR

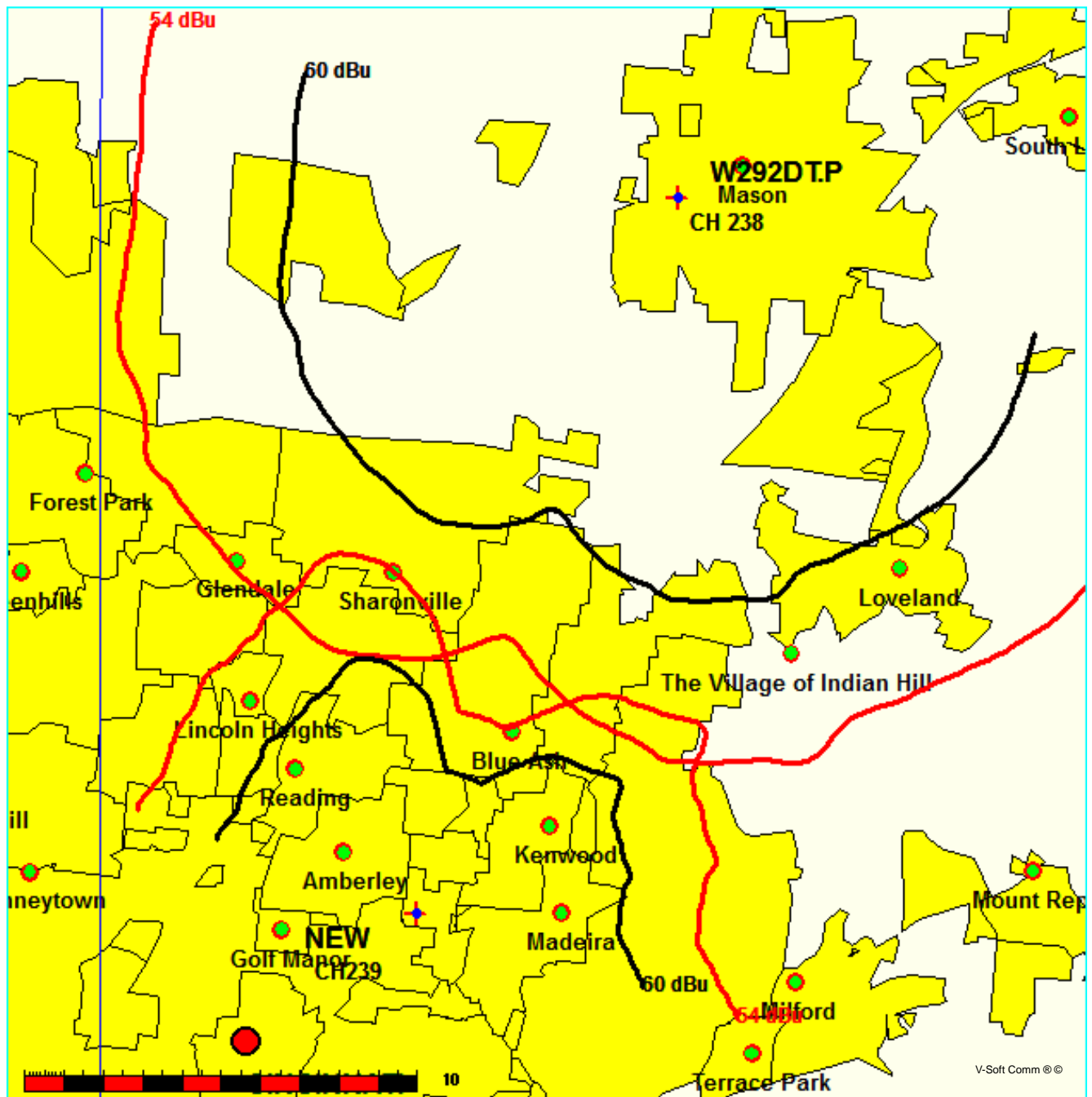
Prot.= 60 dBu, Intef.= 54 dBu

NEW CH 239 L1 BNPL20010122AHT

Lat= 39 11 28.0, Lng= 84 24 24.0

0.018 kW 69.74407 M HAAT, 285 M COR

Prot.= 60 dBu, Intef.= 54 dBu



**New vs. W292DT.P**

12-14-2012      Terrain Data: NGDC 30 SEC      FMOver Analysis

NEW    BNPL20010122AHT

W292DT.P

Channel = 239L1  
Max ERP = 0.017844 kW  
RCAMSL = 285 M  
N. Lat. 39 11 28.0  
W. Lng. 84 24 24.0  
Protected  
60 dBu

Channel = 238D  
Max ERP = 0.08 kW  
RCAMSL = 345 M  
N. Lat. 39 21 10.8  
W. Lng. 84 19 44.2  
Interfering  
54 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
324.0	000.0178	0070.7	005.6	216.7	000.0700	0116.8	016.7	51.86	
325.0	000.0178	0071.5	005.7	216.7	000.0700	0116.8	016.6	51.94	
326.0	000.0178	0072.5	005.7	216.7	000.0700	0116.8	016.5	52.03	
327.0	000.0178	0073.1	005.7	216.7	000.0700	0116.7	016.4	52.11	
328.0	000.0178	0073.2	005.7	216.6	000.0700	0116.5	016.3	52.18	
329.0	000.0178	0073.4	005.7	216.4	000.0700	0116.3	016.2	52.24	
330.0	000.0178	0074.2	005.8	216.4	000.0700	0116.3	016.1	52.32	
331.0	000.0178	0075.6	005.8	216.4	000.0700	0116.3	016.0	52.42	
332.0	000.0178	0077.3	005.9	216.5	000.0700	0116.4	015.9	52.53	
333.0	000.0178	0078.4	005.9	216.5	000.0700	0116.3	015.8	52.62	
334.0	000.0178	0079.0	006.0	216.3	000.0700	0116.1	015.7	52.69	
335.0	000.0178	0079.4	006.0	216.2	000.0700	0115.9	015.6	52.75	
336.0	000.0178	0079.9	006.0	216.1	000.0700	0115.6	015.5	52.82	
337.0	000.0178	0080.6	006.0	216.0	000.0700	0115.4	015.4	52.89	
338.0	000.0178	0081.5	006.0	215.9	000.0700	0115.2	015.3	52.97	
339.0	000.0178	0082.6	006.1	215.8	000.0700	0115.0	015.2	53.05	
340.0	000.0178	0084.1	006.2	215.8	000.0700	0114.9	015.0	53.15	
341.0	000.0178	0086.1	006.2	215.8	000.0700	0115.0	014.9	53.15	
342.0	000.0178	0088.5	006.3	215.8	000.0700	0115.0	014.8	53.31	
343.0	000.0178	0090.8	006.4	215.8	000.0700	0115.0	014.6	53.47	
344.0	000.0178	0092.5	006.5	215.7	000.0700	0114.9	014.5	53.60	
345.0	000.0178	0093.3	006.5	215.5	000.0700	0114.4	014.4	53.69	
346.0	000.0178	0094.2	006.5	215.3	000.0700	0114.0	014.3	53.78	
347.0	000.0178	0094.5	006.5	215.1	000.0700	0113.4	014.2	53.85	
348.0	000.0178	0094.3	006.5	214.8	000.0700	0112.7	014.1	53.88	
349.0	000.0178	0093.4	006.5	214.3	000.0700	0111.7	014.1	53.88	
350.0	000.0178	0092.4	006.5	213.9	000.0700	0110.7	014.0	53.87	
351.0	000.0178	0091.2	006.4	213.4	000.0700	0109.7	014.0	53.85	
352.0	000.0178	0090.0	006.4	213.0	000.0700	0108.8	013.9	53.83	
353.0	000.0178	0088.7	006.3	212.5	000.0700	0107.8	013.9	53.79	
354.0	000.0178	0087.1	006.3	212.0	000.0700	0106.8	013.9	53.74	
355.0	000.0178	0085.1	006.2	211.5	000.0700	0105.8	013.9	53.66	
356.0	000.0178	0083.0	006.1	210.9	000.0700	0104.8	013.9	53.58	
357.0	000.0178	0080.6	006.0	210.3	000.0700	0103.7	013.9	53.46	
358.0	000.0178	0078.0	005.9	209.7	000.0700	0102.4	013.9	53.32	
359.0	000.0178	0075.0	005.8	209.1	000.0700	0101.0	013.9	53.14	
000.0	000.0178	0072.5	005.7	208.6	000.0700	0099.6	014.0	52.97	
001.0	000.0178	0070.2	005.6	208.1	000.0700	0098.2	014.0	52.81	

FMCommander Single Allocation Study - 12-14-2012 - NGDC 30 SEC  
W292DT.P's Overlaps (In= 7.44 km, Out= 9.2 km)

W292DT.P CH 238 D

Lat= 39 21 10.8, Lng= 84 19 44.2

0.07 kW 0 M HAAT, 345 M COR

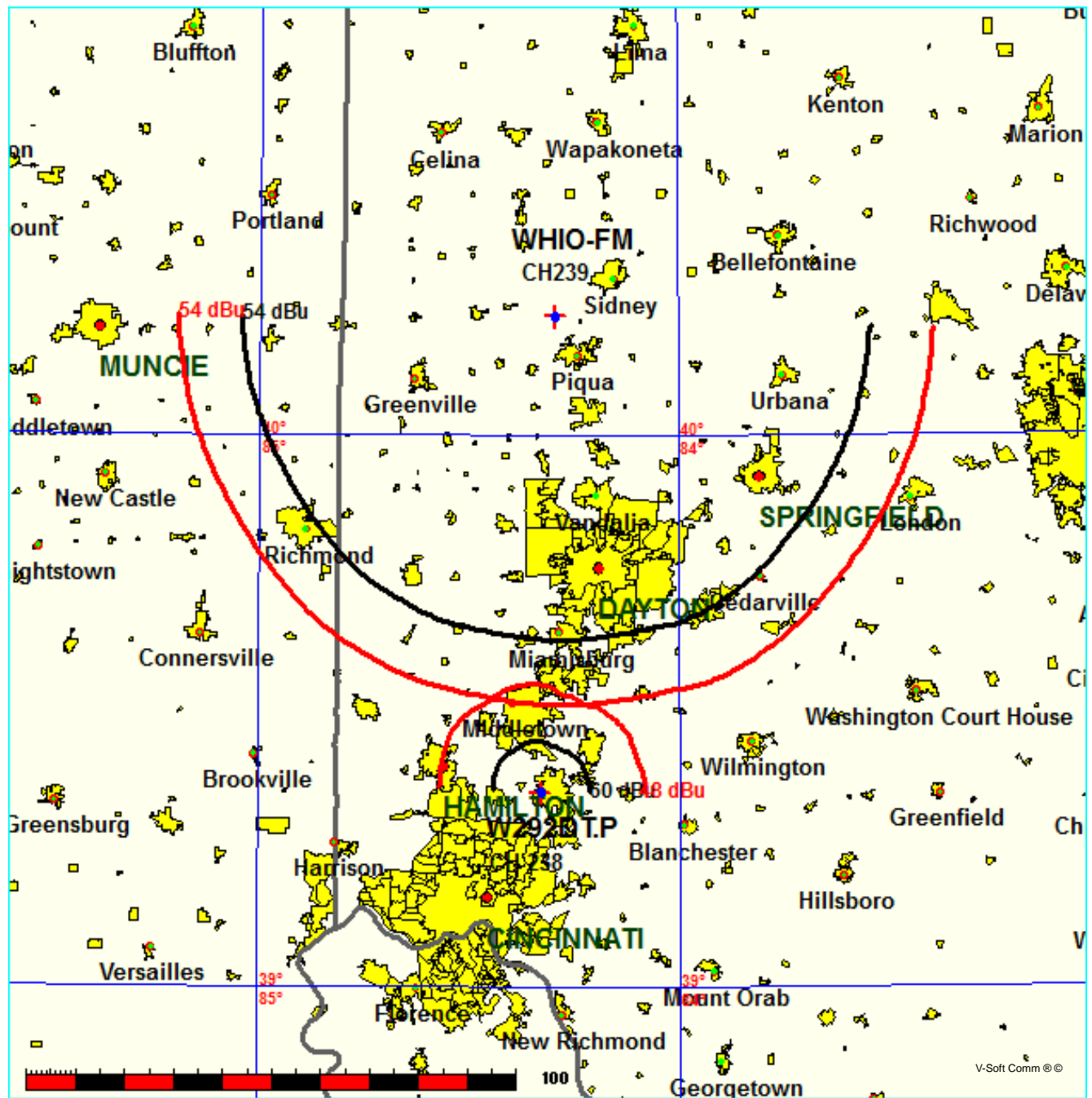
Prot.= 60 dBu, Intef.= 48 dBu

WHIO-FM CH 239 B BLH20110712ABT

Lat= 40 13 03.0, Lng= 84 17 37.0

50.0 kW 145 M HAAT, 444 M COR

Prot.= 54 dBu, Intef.= 54 dBu



**Compliance with C.F.R. 74.1204**

The proposed FM Translator is also located within the protected 54dBu contour of third adjacent channel station WREW, channel 235B, Fairfield, OH. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

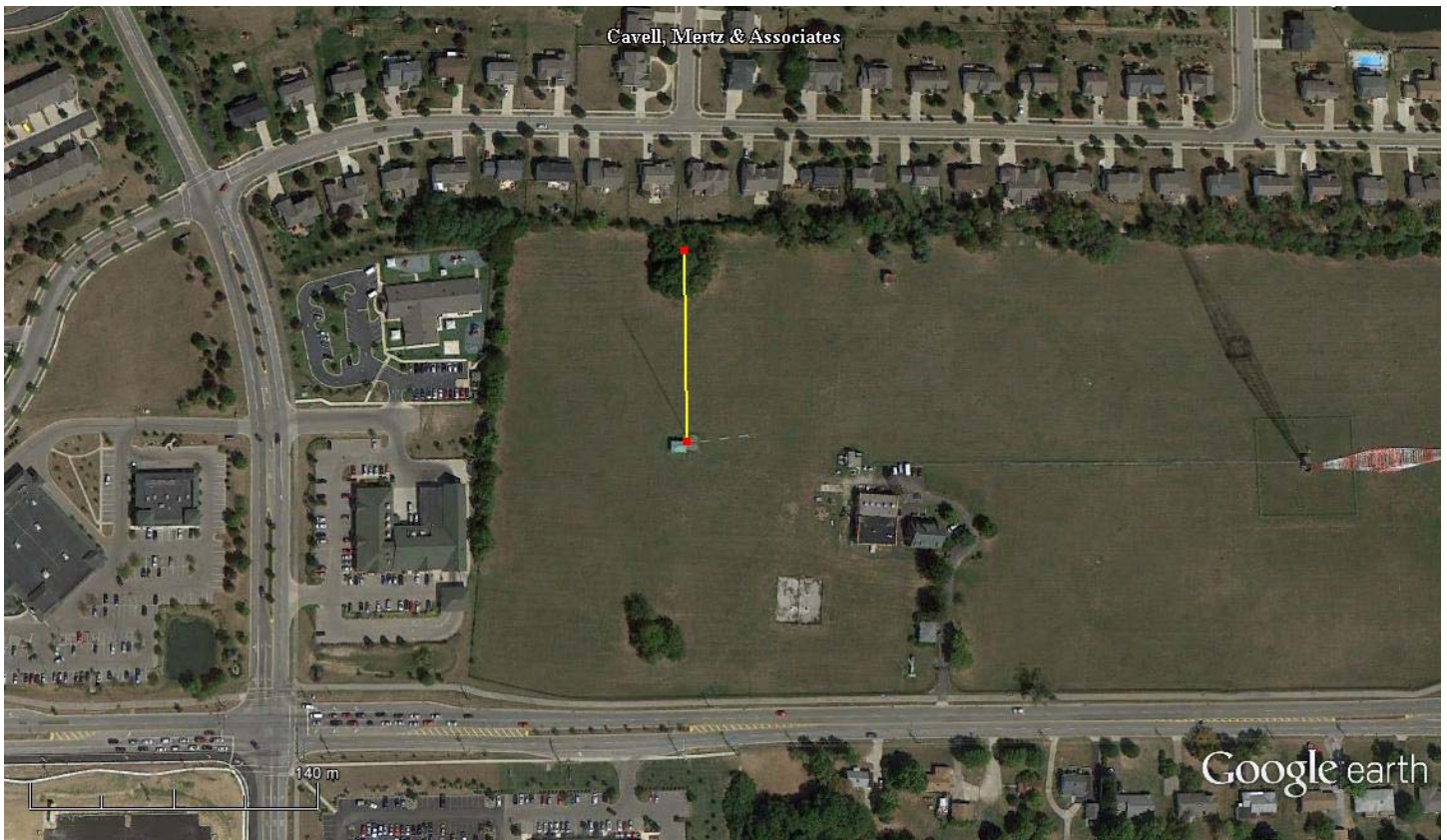
The proposed ERP for W292DT.P:	70 watts
The proposed COR for W292DT.P:	93 meters
WREW F(50/50) contour at proposed site:	76.3dBu
The F(50/10) contour of proposed W292DT:	116.3dBu

The predicted distance to the 116.3dbu interfering contour is 96.5 meters. Taking into account the vertical elevation pattern for the JLCP-1 single bay antenna and the height above ground of 93M, it has been determined that the interfering contour of 116.3dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 57.1M above ground.

As can be seen in Exhibit 13–A2, there are no regularly occupied structures at the base of the tower and there are no structures which are tall enough to enter the 57.1meter aperture.

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.





Google earth

feet 1000  
meters 300



NAD 27

39 21' 10.8" N

84 19' 44.2" W

Marker: 96.5M at zero degrees true North